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(54) INFORMATION VIEWING AID SYSTEM

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an information viewing aid system where viewers exchange recommendation information relating to reception contents and that can smoothly select the contents according to the recommendation information. SOLUTION: A mobile terminal 70 receives recommendation information through the Internet 60. A recommendation reception contents identifier acquisition section 10 acquires a recommendation reception contents identifier from the recommendation information and a recommendation information provision section 20 informs a user about recommended reception contents information. Or an LED is built in a number key of a remote controller of an information receiver 50 and a corresponding number key may be blinked. When received contents are switched, a reception contents switching instruction is given to a recommended reception contents switching

instruction reception section 31, a reception contents switching signal generating section 32 generates a reception contents switching signal and a reception contents switching signal transmission section 33 transmits the reception contents switching signal to a reception information switching section 51 of the information receiver 50.

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**CLAIMS**

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[Claim(s)]

[Claim 1] Are equipment which supports informational viewing and listening using an information receiving set, and the recommendation information about receiving contents is received from on a network. The recommendation receiving contents identifier acquisition section which acquires the receiving contents identifier currently recommended from said recommendation information, Receive the input of change directions to the recommendation information presentation section which shows a user said recommendation information, and said recommendation receiving contents

from a user, and the receive section of said information receiving set is received. Information viewing-and-listening exchange equipment characterized by having receiving contents change signal generation / sending-out section which sends out a receiving contents change signal so that it may change to said recommendation receiving contents.

[Claim 2] Information viewing-and-listening exchange equipment according to claim 1 which is the thing which is equipped with the remote control part which controls the remote operation to the receive section of said information receiving set, and said recommendation information presentation section assigns to said recommendation receiving contents identifier, and to which the condition of the receiving contents directions section with which said remote control part is equipped is changed.

[Claim 3] It is information viewing-and-listening exchange equipment according to claim 2 to which the condition of the receiving contents directions section of said remote control part is changed according to evaluation have the evaluation section whenever [ recommendation / which evaluates the recommendation degree of said recommendation information ], and according [ said recommendation information presentation section ] to the evaluation section whenever [ said recommendation ].

[Claim 4] The information viewing-and-listening exchange equipment according to claim 2 or 3 registration of an input of change directions to said recommendation receiving contents by said receiving contents change signal generation / sending-out section is the receptionist by the depression of the receiving contents directions section of said remote-control part from which said condition changed, and said receiving contents change signal send out is a receiving contents change signal by directions of the receiving contents directions section of said remote-control part.

[Claim 5] The recommendation information generation section which generates the recommendation information about the receiving contents which are equipment which supports informational viewing and listening using an information receiving set, acquire a receiving contents identifier to recommend information viewing and listening to, and contain the receiving contents identifier concerned, The information viewing-and-listening exchange equipment had the recommendation information distribution place information storing section which stores the distribution place information on the network which distributes said recommendation information, and the recommendation information distribution section which distributes said generated recommendation information to the distribution place chosen from the recommendation information distribution place in which it was stored by said recommendation information distribution place information storing section.

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## DETAILED DESCRIPTION

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[Detailed Description of the Invention]

[0001]

[Field of the Invention] The communication link on a network is possible for this invention, and it relates to the equipment which supports viewing and listening of the information in the information terminal equipped with the information receive section which receives information from on a network. It is related with the equipment which supports viewing and listening of the information in a personal digital assistant especially.

[0002]

[Description of the Prior Art] In recent years, the various applications using a personal digital assistant are spreading with the spread of personal digital assistants, and the structure (an electronic mail, an electronic bulletin board, real-time chat system, etc.) for performing information offer which used the personal digital assistant as the tool is also offered. New information offer environments -- information offer exchanged in personal computers can perform interconnect with the Internet conventionally by offer of the cell phone service (I mode (TM)) made possible especially using a personal digital assistant -- are ready, and the smooth cooperation with these new communications services and the communications services (for example, television broadcasting etc.) of a conventional type is called for.

[0003] The Internet which will be viewing and listening of the television broadcasting which is the communications service of a conventional type, and new communications service as what connects the communications service using a personal digital assistant and the communications service of a conventional type if the terminal called the set top box of the dedication which enabled connection with the Internet about viewing and listening of television broadcasting is offered and this set top box is used can be used using one set of a television broadcasting receiving set.

[0004]

[Problem(s) to be Solved by the Invention] However, although the conventional set top box enables connection with the Internet, in order that it may use the television broadcasting television function which the body of a television broadcasting receiving set offers about viewing and listening of television broadcasting, both structure is offered according to an individual, viewing and listening of television broadcasting and Internet use are performed individually independently, and both are not unified.

[0005] Now, the recommendation information about the television program which he recommends is exchanged among other viewers about viewing and listening of television broadcasting using a personal digital assistant, the viewer who was viewing and listening to another television program receives the recommendation about a television program, and it assumes changing the contents of the television broadcasting to which he views and listens according to this recommendation information.

[0006] According to the conventional technique, the Internet can be used for the recommendation information about the television program which he recommends using a personal digital assistant, for example, a distribution partner can be specified and seen off in the form of an electronic mail. However, since the viewer who received recommendation is viewing and listening to another television program, the Internet is not accessed but the television broadcasting receiving set concerned has the problem that arrival of an electronic mail including the recommendation information concerned cannot be known immediately, and cannot be perused immediately.

[0007] With a television broadcasting receiving set, independently, if the viewer who received recommendation has the terminal which can use the Internet, such as a personal digital assistant, at a familiar place, he can know the arrival of an electronic mail. However, the viewer who received recommendation after getting to know the arrival of an electronic mail has to access an electronic mail using the terminal which can use the Internet, such as a personal digital assistant, has to peruse the contents of the electronic mail, and has to know the contents identifier of the program which corresponds from program recommendation information, and the contents which press, view and listen to number keys, such as a remote controller of a television broadcasting receiving set, etc. must be changed. The viewer itself who received recommendation needed to do the activity of these single strings with the help, and it had the problem that it was necessary to pay a great effort.

[0008] Although the above-mentioned example made television broadcasting reception the example, also in perusal of the homepage of the World Wide Web (it is hereafter written as WWW) of the Internet, the same problem occurs, for example. In addition, with contents here, not only a television program (channel \*\*\*\*) but the address of a homepage etc. is included.

[0009] Furthermore, the side which provides other viewers with the recommendation information about the television program which he recommends also had the problem that a great effort was needed, about viewing and listening of television broadcasting. For example, the case where he wants to recommend also to a certain friend that it views and listens to the program of the television broadcasting concerned about the program of the television broadcasting to which a current him is viewing and listening is assumed. First, it is necessary to check the receiving contents of the program of the television broadcasting to which a current one is viewing and listening, and to generate the recommendation information which contains the receiving contents identifier concerned using the terminal which can use the Internet. For that purpose, it is necessary to start applications, such as an electronic mail, to create an electronic mail sentence using a keyboard etc., and to investigate the mail address of the partner who wants to distribute recommendation information, and it necessary to distribute the electronic mail created to the mail address concerned. Thus, there was a problem of needing a great effort. In addition, whether an electronic mail including

recommendation information is perused immediately has an unknown distribution partner.

[0010] The information viewing-and-listening exchange equipment of this invention aims at supporting so that the viewer who received recommendation from other viewers may perform simply and smoothly processing in which the information receiving contents to which he is viewing and listening are changed to the recommended information receiving contents according to the recommendation information concerned, about viewing and listening of information receiving contents, such as television broadcasting, in view of the above-mentioned trouble.

[0011] Moreover, the information viewing-and-listening exchange equipment of this invention aims at supporting so that processing in which the recommendation information about information receiving contents, such as television broadcasting which he recommends, is distributed to other viewers can be performed simply and smoothly.

[0012]

[Means for Solving the Problem] In order to solve the above-mentioned technical problem, the information viewing-and-listening exchange equipment of this invention The recommendation receiving contents identifier acquisition section which acquires the receiving contents identifier which receives the recommendation information about receiving contents from on a network as equipment of a recommendation information receiving side, and is recommended from said recommendation information, Receive the input of change directions to the recommendation information presentation section which shows a user said recommendation information, and said recommendation receiving contents from a user, and the receive section of said information receiving set is received. It is characterized by having receiving contents change signal generation / sending-out section which sends out a receiving contents change signal so that it may change to said recommendation receiving contents.

[0013] The information receiving contents to which receive the recommendation information from other viewers, and he is viewing and listening by the above-mentioned configuration according to the recommendation information concerned can be changed to the recommended information receiving contents.

[0014] Moreover, the information viewing-and-listening exchange equipment of this invention is equipped with the remote-control part which controls the remote operation to the receive section of said information receiving set, and if the condition of the receiving contents directions section with which said remote-control part is equipped which said recommendation information presentation section assigns to said recommendation receiving contents identifier changes, the receiving contents identifier correspond only at seeing the receiving contents directions section of the remote controller from which the condition changed to recommendation information

can grasp.

[0015] Furthermore, registration of an input of change directions to said recommendation receiving contents by said receiving contents change signal generation / sending-out section It is the receptionist by the depression of the receiving contents directions section of said remote control part from which said condition changed. If said receiving contents change signal to send out shall be a receiving contents change signal by directions of the receiving contents directions section of said remote control part The receiving contents directions section of the remote controller from which the condition changed can be changed to the receiving contents recommended only by carrying out a direct depression.

[0016] Moreover, if it has the evaluation section whenever [ recommendation / which evaluates the recommendation degree of recommendation information ] and said recommendation information presentation section changes the condition of the receiving contents directions section of said remote control part according to evaluation by the evaluation section whenever [ said recommendation ], the recommendation degree from a recommender can be known.

[0017] The information viewing-and-listening exchange equipment of this invention moreover, as equipment by the side of recommendation information distribution The recommendation information generation section which generates the recommendation information about the receiving contents which acquire a receiving contents identifier to recommend information viewing and listening to, and contain the receiving contents identifier concerned, It carries out having had the recommendation information distribution place information storing section which stores the distribution place information on the network which distributes said recommendation information, and the recommendation information distribution section which distributes said generated recommendation information to the distribution place chosen from the recommendation information distribution place in which it was stored by said recommendation information distribution place information storing section as the description.

[0018] Processing in which the recommendation information about information receiving contents, such as television broadcasting which he recommends, is distributed to other viewers by the above-mentioned configuration can be performed simply and smoothly.

[0019]

[Embodiment of the Invention] It explains referring to drawing about the operation gestalt of the information viewing-and-listening exchange equipment of this invention.

[0020] (Operation gestalt 1) The information viewing-and-listening exchange equipment of this operation gestalt 1 is the example of a configuration of the information viewing-and-listening exchange equipment by the side of the addressee who receives recommendation information from other viewers. It is equipment

supported so that the viewer who received recommendation from other viewers can perform simply and smoothly processing which changes the information receiving contents to which he is viewing and listening to the recommended information receiving contents according to the recommendation information concerned.

[0021] In addition, in the following explanation, pocket mold terminals are a cellular phone, a remote controller, a pocket mold computer, etc., and are not limited especially. The approaches, such as a thing of a carbon button depression type, a touch-sensitive thing, and a thing of a voice input type, are not asked about the input means, either. Furthermore, it cannot be overemphasized that this invention can be similarly applied to non-portable terminals, such as a personal computer of not only a pocket mold terminal but a desktop.

[0022] Moreover, as for contents here, not only a television program (channel \*\*\*\*) but the address of a homepage etc. is included.

[0023] Drawing 1 is drawing showing the example of a block configuration of the information viewing-and-listening exchange equipment by the side of the addressee of the recommendation information on the operation gestalt 1.

[0024] drawing 1 -- setting -- 10 -- the recommendation receiving contents identifier acquisition section and 20 -- for receiving contents change signal generation / sending-out section and 40, as for a network interface and 50, the Internet and 70 are [ the recommendation information presentation section and 30 / a pocket mold terminal and 80 ] the information sources as for an information receiving set and 60.

[0025] The information receiving set 50 is a television broadcasting receiving set, if it is equipment which receives the information offered from the information source 80, for example, the information source 80 is television broadcasting. Moreover, if it is the WWW server in which the information source 80 has the homepage of WWW of the Internet, it is the WWW client equipped with the WWW browser function. For convenience, below, the information source 80 is television broadcasting and it considers as the thing of explanation whose information receiving set 50 is a television broadcasting receiving set.

[0026] The recommendation receiving contents identifier acquisition section 10 is a part which acquires the receiving contents identifier which receives the recommendation information about receiving contents from on a network, and is recommended from said recommendation information.

[0027] The recommendation information presentation section 20 is a part which shows a user the recommendation receiving contents information which is the recommendation information received from the recommendation receiving contents identifier acquisition section 10. Various things can be used as a presentation means to a user, for example, you may be the color and monochrome display using the liquid crystal display section on the pocket mold terminal 70, and the voice guidance using a loudspeaker is sufficient. Moreover, the condition of the program key which the



recommendation receiving contents change directions reception section 31 of receiving contents change signal generation / sending-out section 30 has may be changed. A program key is a key which receives the input for changing contents here, and a program key turns into a softkey prepared on the touch panel, when included in the terminal which used not only a hard carbon button-type carbon button but the touch panel. If a program key is a hard carbon button-type carbon button, it will turn on and blink LED included in the program key concerned. Moreover, if a program key is a touch-sensitive softkey, the program key setting field concerned on a touch panel will be turned on and blinked. Under the present circumstances, it combines with number key lighting and flashing, and it may display with liquid crystal or the audible tone for charming the cautions from a loudspeaker may be shown.

[0028] Receiving contents change signal generation / sending-out section 30 is equipped with the recommendation receiving contents change directions reception section 31, the receiving contents change signal generation section 32, and the receiving contents change signal sending-out section 33. The recommendation receiving contents change directions section 31 is a part which receives the input of change directions to the recommendation receiving contents from a user. The receiving contents change signal generation section 32 is a part which combines with the change directions to the recommendation receiving contents from the user through the recommendation receiving contents change directions section 31, and generates a receiving contents change signal. The receiving contents change signal sending-out section 33 is a part which sends out the receiving contents change signal generated by the receiving contents change signal generation section 32 to the receipt information change section 51 of the information receiving set 50. The receipt information change section 51 of the information receiving set 50 which received the receiving contents change signal will change receiving contents to recommendation receiving contents. That is, receiving contents change signal generation / sending-out section 30 will also have a function as a remote control part for the receiving contents change of the information receiving set 50.

[0029] A network interface 40 is a network interface part which enables the communication link on the Internet 60, and contains hardware required for the communication link using the Internet, and software.

[0030] The information receiving set 50 is equipped with the receipt information change section 51, the information receive section 52, and the receipt information display 53. Here, each element of the receipt information change section 51, the information receive section 52, and the receipt information display 53 shall be built into a television broadcasting receiving set as an example. You may be browsing equipment which is not limited to television broadcasting televising, of course, and peruses the homepage of the Internet. The receipt information change section 51 is a part which changes receiving contents, and is the so-called receiving channel change

part which changes the tuning frequency of television broadcasting tuning by the television broadcasting receiving set. If it is browsing equipment which peruses the homepage of the Internet, it is the input part which changes URL. The information receive section 52 is a part which receives the information with which the receiving contents identifier specified by the receipt information change section 51 is assigned and provided. It is the tuner which tunes up the television broadcasting of the specified frequency band by the television broadcasting receiving set, and is received. It is the part which stretches a link to URL specified with the browsing equipment which peruses the homepage of the Internet. The receipt information display 53 is a part which displays the received information. It is the receiving set part which displays tuned-up television \*\*\*\*\* by the television broadcasting receiving set. With the browsing equipment which peruses the homepage of the Internet, it is a monitor part. [0031] Moreover, in this example, each element of the recommendation receiving contents identifier acquisition section 10, the recommendation information presentation section 20, receiving contents change signal generation / sending-out section 30, and a network interface 40 shall be built into the pocket mold terminal 70. The pocket mold terminal 70 concerned also includes the function as a remote control part for a receiving contents change of the information receiving set 50.

[0032] Next, the example of the flow of processing actuation of the information viewing-and-listening exchange equipment of this operation gestalt 1 is explained, referring to the flow chart of drawing 2 .

[0033] Since it is the example of a configuration of the information viewing-and-listening exchange equipment by the side of the addressee to whom this operation gestalt 1 receives recommendation information from other viewers in the following explanation, the recommendation information about information receiving contents should be distributed through the Internet, and it shall have arrived at the address by the side of the addressee concerned.

[0034] First, recommendation information is received through a network interface 40 from on the Internet 60 (step S201).

[0035] The example of recommendation information is shown in drawing 3 . The example of the recommendation information on drawing 3 (a) is an example which attaches the recommendation receiving contents information on the television program to recommend as data indicated by the text of an electronic mail. The example of the recommendation information on drawing 3 (b) is an example which makes recommendation receiving contents information on the television program to recommend the attached file of an electronic mail. The example of the recommendation information on drawing 3 (c) is an example which has indicated the recommendation receiving contents information on the television program to recommend as a part of header information of an electronic mail. Since all express that it is the information on the receiving contents currently recommended, they have

indicated the contents identifier which forms a special symbol, for example, is recommended after "TV:." As for this agreement, it is desirable to unify on the both sides of the information viewing-and-listening exchange equipment by the side of distribution and the information viewing-and-listening exchange equipment of a receiving side.

[0036] The recommendation receiving contents identifier acquisition section 10 which received recommendation information acquires the receiving contents identifier currently recommended from recommendation information from a network interface 40 (step S202). In this example, the recommendation receiving contents identifier acquisition section 10 acquires the number following a special symbol "TV:." Drawing 3 (a) "8" is acquired in the example of - (c). Moreover, the distribution person ID, an attachment comment, etc. of the information which accompanies recommendation receipt information, for example, the information concerned, are acquired collectively.

[0037] Next, the recommendation information presentation section 20 shows reception and a user recommendation receiving contents information for recommendation receiving contents identifier information from the recommendation receiving contents identifier acquisition section 10 (step S203). In addition, since an electronic mail is asynchronous communication, when an electronic mail is received, information viewing-and-listening exchange equipment may send an alarm, and a notice means to notify a user of e-mail reception may be used together.

[0038] The recommendation information presentation section 20 takes out the directions which turn on and blink LED incorporated to the program key of the recommendation receiving contents change directions reception section 31 equivalent to a recommendation receiving contents identifier, and a recommendation receiving contents identifier is shown [ turning on and blinking LED of the program key correspond in the recommendation receiving contents change directions reception section 31, and ] to a user. Drawing 4 is very easy drawing centering on the appearance of the pocket mold terminal 70. The number key 71, the recommendation information distribution key 72 later mentioned with the operation gestalt 2, the liquid crystal display section 73, and the communications department 74 are established in the front face of the pocket mold terminal 70. This is a configuration also including the function of the remote control part for information receiving set 50, and the number key 71 can be used as a key for the receiving contents change directions as a remote controller of the information receiving set which the user itself usually uses. A part of recommendation information presentation section 20 and recommendation receiving contents change directions reception section 31 consist of examples of drawing 4 using the number key concerned. Drawing 4 shows signs that LED of the program key "8" which corresponds to a recommendation receiving contents identifier among the number keys 71 is on. The recommendation information presentation section 20 has the function to turn on and blink LED prepared in the interior of the number key 71,

and since LED of the number key 71 interior applicable to recommendation information is turned on and blinked, "8" number key 71 turns on and blinks it here. Moreover, in this example, the recommendation information presentation section 20 has the function to show the liquid crystal display section 73 the information on a text etc., and also displays collectively the accompanying information acquired [ comment / of the recommendation information concerned / distribution person ]. A user gets to know the contents of the recommendation information containing a recommendation receiving contents identifier through lighting and flashing of this number key 71, the comment of the liquid crystal display section 73, etc.

[0039] Next, a user judges whether it changes to the shown recommendation receiving contents, and chooses whether to input change directions of receiving contents to the recommendation receiving contents change directions reception section 31 (step S204). In drawing 4 , lighting and the number key "8" of the recommendation receiving contents change directions reception section 31 which is blinking perform receiving contents change directions by carrying out a depression. Here, it considers as the thing of explanation into which receiving contents change directions were inputted to the recommendation receiving contents change directions reception section 31 for convenience (step S204:Y).

[0040] The recommendation receiving contents change directions reception section 31 detects that receiving contents change directions, i.e., a number key, were pushed, and the receiving contents change signal generation section 32 generates a receiving contents change signal (step S205). The receiving contents change signal generation section 32 must generate the signal which can understand the receipt information change section 51 of the information receiving set 50 in this receiving contents change signal generation. Depending on the class of information receiving set 50, the telecommunications standard of an ISO criterion or an industry standard may exist, and two or more various kinds of telecommunications standards may exist. Moreover, the class of signal may change also with manufacturers. As a means to distribute furthermore, the difference in infrared ray communication, radio, etc. also exists. Drawing 5 is shown focusing on the example of a configuration of receiving contents change signal generation / sending-out section 30 in the case of corresponding to two or more telecommunications standards. Parts other than receiving contents change signal generation / sending-out section 30 of a personal digital assistant 70 omitted illustration. In drawing 5 , the receiving contents change signal generation section 32 is equipped with the telecommunications standard storing section 321 and the telecommunications standard setting section 322. The telecommunications standard storing section 321 is a part which stores the logic of various kinds of telecommunications standards. According to a setup of the telecommunications standard setting section 322, the signal classification of a telecommunications standard or a manufacturer corresponding to the information receiving set 50 is

chosen. Recommendation receiving contents information is exchanged using this telecommunications standard chosen.

[0041] Next, the receiving contents change signal sending-out section 33 transmits a receiving contents change signal to the receipt information change section 51 of the information receiving set 50 (step S206). In the example of drawing 5, the receiving contents change signal sending-out section 33 and the receipt information change section 51 are exchanging the receiving contents change signal with infrared means of communications.

[0042] The receipt information change section 51 decodes the received receiving contents change signal, controls the information receive section 52, and the information receive section 52 changes receiving contents, and receives recommendation receiving contents, and it displays the contents concerned currently recommended on the receipt information display 53 (step S207). If it is the case of a television receiver, the information receive section 52 will control the received frequency of television broadcasting by the tuner, will receive the television broadcasting of "8" channels, and will display the television program applicable to the receipt information display 53.

[0043] In addition, although it is discharge of lighting and flashing of the number key 71, treatment of canceling lighting and flashing to the timing which pressed lighting and the number key 71 which is blinking is sufficient, and if fixed time amount progress is carried out, it is good also as treatment of which lighting and flashing are canceled.

[0044] As mentioned above, according to the information viewing-and-listening exchange equipment of this operation gestalt 1, the viewer who received recommendation from other viewers can perform simply and smoothly processing which changes the information receiving contents to which he is viewing and listening to the recommended information receiving contents according to the recommendation information concerned.

[0045] (Operation gestalt 2) The information viewing-and-listening exchange equipment of this operation gestalt 2 is the example of a configuration of the information viewing-and-listening exchange equipment by the side of the distribution person who distributes the recommendation information about information receiving contents to other viewers. It is equipment supported so that processing in which the recommendation information about information receiving contents, such as television broadcasting which he recommends, is distributed to other viewers can be performed simply and smoothly.

[0046] Drawing 6 is drawing showing the example of a block configuration of the information viewing-and-listening exchange equipment by the side of the distribution person of the recommendation information on the operation gestalt 2.

[0047] drawing 6 -- setting -- 110 -- the recommendation information generation section and 120 -- for the recommendation information distribution place information

storing section and 130, as for an information receiving set and 60, a network interface and 50 are [ the recommendation information distribution section and 40 / the Internet and 170 ] the information sources as for a pocket mold terminal and 80.

[0048] The information receiving set 50 shall be equipment which receives the information offered from the information source 80, also in this example, according to a receiving side, the information source 80 shall be television broadcasting, and the information receiving set 50 shall be a television broadcasting receiving set.

[0049] Moreover, in this example, the recommendation information generation section 110, the recommendation information distribution place information storing section 120, the recommendation information distribution section 130, and a network interface 40 shall be included in the pocket mold terminal 170. Like the receiving-side equipment of the operation gestalt 1, the pocket mold terminal 170 is a configuration containing the remote control part for a receiving contents change of the television broadcasting receiving set for which the information receiving set 50 is incorporated, and the part 140 which controls the information receiving set 50 is formed.

[0050] The recommendation information generation section 110 is a part which generates the recommendation receiving contents information about the receiving contents which acquire a receiving contents identifier to recommend information viewing and listening to, and contain the receiving contents identifier concerned. It has the recommendation receiving contents identifier input section 111 and a user interface 112. The recommendation receiving contents identifier input section 111 is a part which inputs the receiving contents identifier which the user itself recommends. A user interface 112 is an interface which inputs various information, when a user wants to attach a comment etc. as a part of recommendation information. Although there are a keyboard, a mouse, and a thing that can perform the easy Cana alphabetic character input in recent years using a key in a cellular phone etc. further, such key input equipment is also contained as a simple user interface.

[0051] Although the gestalt of the recommendation receiving contents identifier input section 111 is not limited, drawing having shown the example of a configuration which uses the recommendation information distribution key 72 prepared in the pocket mold terminal 170 as the recommendation receiving contents identifier input section 111 is drawing 4 . Drawing 7 shows the situation of recommendation receiving contents information generation. If one of the functions of the recommendation information distribution key 72 is pushed, it will shift to recommendation receiving contents information generation mode, and a user will input recommendation receiving contents information using the number key 71 and a user interface 112. The information under generation in the liquid crystal display section 73 can also be displayed in that case. Drawing 7 (a) shows the situation. In this case, in an accompanying comment, the user himself inputs "8" after "TV:" identifier. Moreover, if a viewer is the case where the receiving contents change etc. is being operated by remote control using information

viewing-and-listening exchange equipment, the thing of acquiring the receiving channel number of the program under current viewing and listening by the depression of the recommendation information distribution key 72 will be mentioned as another function of the recommendation information distribution key 72. That is, the receiving contents identifier concerned can be treated with a recommendation receiving contents identifier by holding the receiving contents identifier to which a user changes receiving contents, and is viewing and listening now. Drawing 7 (b) shows the situation. If current [ eight ] are under viewing and listening, a contents identifier "8" will be automatically given after the identifier of "TV:."

[0052] Moreover, the recommendation information generation section 110 can also be considered as the configuration which gives a distribution person's ID information to the recommendation receiving contents information generated automatically because of the facilities of a receiving side. Furthermore, the information which shows the recommendation degree of the recommendation information concerned can also be given so that it may mention later in the operation gestalt 3. It mentions later in detail.

[0053] The recommendation information distribution place information storing section 120 is a part which stores the information of the phase hand who distributes recommendation receiving contents information. When distributing information by Internet 60 course, a phase hand's Internet address is stored.

[0054] The recommendation information distribution section 130 is a part which distributes the recommendation receiving contents information generated in the recommendation information generation section 110. It is [ that a distribution place should be specified in distribution ] desirable to have the recommendation information distribution place specification part 131. For example, the approach of displaying on the liquid crystal display section 73 which showed the distribution place list stored in the recommendation information distribution place information storing section 120 to drawing 4 as an example of a recommendation information distribution place specification method is mentioned. A user chooses 1 or two or more partners who distribute from this list, and specifies a distribution place. The recommendation information distribution section 130 distributes recommendation receiving contents information to a distribution place.

[0055] Next, the example of the flow of processing actuation of the information viewing-and-listening exchange equipment of this operation gestalt 2 is explained, referring to the flow chart of drawing 8 .

[0056] First, the user who is viewing and listening to the information receiving contents which are the information receiving sets 50 operates the recommendation receiving contents identifier input section 111 of the recommendation information generation section 110, and inputs a recommendation receiving contents identifier noting that he wants to recommend the program under current viewing and listening to other acquaintances (step S801). Here, it considers as the example of a

configuration which uses the recommendation information distribution key 72 prepared as a part of remote control part for information receiving set 50 which the pocket mold terminal 170 contains as the recommendation receiving contents identifier input section 111. The recommendation information distribution key 72 is pressed, it shifts to recommendation receiving contents information generation mode, the number key 71 is pressed, and a recommendation receiving contents identifier is inputted.

[0057] Next, the recommendation comment which accompanies if needed is inputted (step S802). In this example, it inputs using a user interface 112. Moreover, distribution person ID information is also given collectively.

[0058] The recommendation information generation section 110 adjusts information, such as a recommendation receiving contents identifier and a recommendation comment, and generates recommendation receiving contents information (step S803).

[0059] Next, the information on a distribution place is acquired from the recommendation information distribution place information storing section 120 (step S804). Here, recommendation information distribution place information is shown in the liquid crystal display section 73 prepared in pocket mold terminal 70' a list table, and a distribution place is specified by choosing a list number.

[0060] Next, the recommendation information distribution section 130 distributes the recommendation receiving contents information concerned via the Internet to a recommendation information distribution place (step S805).

[0061] In addition, the distributed recommendation receiving contents information is processed along with the flow chart shown in drawing 2 with the equipment by the side of an addressee.

[0062] As mentioned above, according to the information viewing-and-listening exchange equipment of this operation gestalt 2, processing in which the recommendation information about information receiving contents, such as television broadcasting which he recommends to other viewers, is distributed to other viewers can be performed simply and smoothly.

[0063] (Operation gestalt 3) The information viewing-and-listening exchange equipment of this operation gestalt 3 evaluates and detects the recommendation degree of the recommendation information receiving contents information from other viewers, tells a user about the recommendation degree concerned, and raises a user's convenience further.

[0064] Drawing 9 is drawing showing the example of an addressee side equipment block configuration of the information viewing-and-listening exchange equipment of the operation gestalt 3. Compared with drawing 1, the evaluation section 90 is added whenever [ recommendation ].

[0065] The evaluation section 90 is a part which evaluates the recommendation degree of recommendation information whenever [ recommendation ]. various to the



approach of evaluating a recommendation degree -- certain \*\* The attribute information about a recommendation degree is given into recommendation information, and one is the approach of detecting and evaluating the attribute information about the recommendation degree concerned. In the equipment by the side of the distribution person of the recommendation information shown in the operation gestalt 2, this gives recommendation degree information as a part of recommendation information, and decodes the recommendation degree information concerned in the equipment by the side of an addressee. For example, when setting the value of recommendation degree information to "2" when making recommendation degree information "1" into a default and recommending it strongly, or recommending strongly especially, the value of recommendation degree information is set to "3." Other evaluation approaches count the recommended count and evaluate the size of the count of recommendation. It can assume that recommendation overlaps from two or more recommendation origin, or that there are many counts of recommendation means that there was recommendation again and again from the same people, and it can be judged that a recommendation degree is high.

[0066] The recommendation information presentation section 20 changes the condition of the number key 71 for information receive section 50 of a personal digital assistant 70 according to evaluation by the evaluation section 90 whenever [ recommendation ]. This has enlarged sound volume of an audible tone which is for showing the magnitude of a recommendation degree so that intelligibly for a user, for example, makes the flashing pitch of the number key 71 quick according to the magnitude of a recommendation degree and which enlarges a lighting illuminance.

[0067] According to the information viewing-and-listening exchange equipment of this operation gestalt 3, the recommendation degree of the recommendation information receiving contents information from other viewers can be evaluated and detected, a user can be told about the recommendation degree concerned, and a user's convenience can be raised further.

[0068] (Operation gestalt 4) The use which combined the information viewing-and-listening exchange equipment by the side of the distribution person who mentioned above in the operation gestalten 1-3 as an operation gestalt 4, and an addressee was shown very briefly.

[0069] Drawing 10 is an example in case the information source 80 is television broadcasting. The recommendation information distribution side system was shown in left-hand side, and the recommendation information receiving system was shown in right-hand side.

[0070] The user 200 who distributes recommendation information is looking at the television broadcasting receiving set 210 containing the information receiving set 50. It is equivalent to the pocket mold terminal 170 with which the contents change remote controller 220 for television broadcasting receiving set 210 contains the

remote control part told to the operation gestalt 2, and the recommendation information generation section 110, the recommendation information distribution place information storing section 120, the recommendation information distribution section 130, and a network interface 40 are contained. The number key 71, the recommendation information distribution carbon button 72, the liquid crystal display section 73, and the communications department 74 are established in the remote controller 220. The recommendation information distribution key 72 is equivalent to the recommendation receiving contents identifier input section 111, and the communications department 74 is equivalent to the recommendation information distribution section 130.

[0071] A user 200 does the depression of the recommendation information distribution key 72 to recommend to a user 300 the program (for example, contents identifier "1") which is carrying out current viewing and listening. Recommendation information including the information of a contents identifier "1" is generated by the recommendation information generation section 110, and a user's 300 Internet address is further obtained from the recommendation information distribution place information storing section 120. The recommendation information concerned is distributed by the recommendation information distribution section 130 on the Internet.

[0072] Recommendation information is received by the addressee side system through the Internet 60.

[0073] The user 300 who received recommendation information presupposes, in the television broadcasting receiving set 310 containing the information receiving set 50, it was viewing and listening to other programs "4", for example, contents identifier. The channel change remote controller 320 for television broadcasting receiving set 310 is the pocket mold terminal 70 containing the remote control part told to the operation gestalt 1, and contains the recommendation receiving contents identifier acquisition section 10, the recommendation information presentation section 20, receiving contents change signal generation / sending-out section 30, and a network interface 40. The number key 71, the recommendation information distribution carbon button 72, and the liquid crystal display section 73 are formed in the remote controller 320. The number key 71 serves both as the recommendation receiving contents change directions reception section 31 of receiving contents change signal generation / sending-out section 30 and the receipt information change section 51 which are told to the operation gestalt 1. Moreover, LED is built in the number key 71 and it is equivalent to a part of recommendation information presentation section 20.

[0074] A recommendation receiving contents identifier is acquired by the recommendation receiving contents identifier acquisition section 10, and LED of the number key 71 which corresponds by the recommendation information presentation section 20 blinks the received recommendation information. The number key of a

contents identifier "1" blinks in this example.

[0075] A user 300 does the depression of the number key of the contents identifier "1" which is blinking that receiving contents should be changed according to recommendation information. It means that the recommendation receiving contents change directions reception section 31 had received recommendation receiving contents change directions, and in this example, it means that the receipt information change section 51 as a remote control part was pushed further, and the receiving contents of the television broadcasting receiving set 310 change to the contents of a contents identifier "1" from the contents of a contents identifier "4."

[0076] A user 300 can change the number key 71 which merely blinked to the receiving contents recommended only by carrying out a depression as mentioned above.

[0077] It is also the same as when the information source 80 is the homepage of the Internet. In this case, URL of the homepage of specification [ a remote controller 220 or 320 / the number key 71 ] shall be assigned. A user 200 recommends the homepage under present viewing and listening "http://www1.com" to a user 300, and the number key 71 equivalent to "http://www1.com" in the remote controller 320 of the user 300 who is viewing and listening to the homepage of "http://www2.com" blinks. If the depression of the number key 71 concerned which is blinking is carried out, said address will be inputted into the address input column of a browser, and the link place of a homepage will change to the recommended homepage concerned. When the browser has not started, you may make it a browser start automatically. As long as it is the case where an information receiving set is television broadcasting receiving by the set top box, you may make it switch to an Internet connectivity automatically.

[0078] In addition, although the above-mentioned example explained the example of the distribution means of recommendation receiving contents information as an electronic mail, it is not limited to an electronic mail and like a chat cannot be overemphasized.

[0079] As mentioned above, as shown in the information viewing-and-listening support system of this operation gestalt 4, the recommendation information about information receiving contents can be distributed from the distribution side system of recommendation information, recommendation information can be received in a receiving system, and it can carry out simply [ a series of processings in which the information receiving contents to which it is viewing and listening are changed to the recommended information receiving contents ], and smoothly.

[0080] The following terms are further indicated about the information viewing-and-listening exchange equipment of this invention.

[0081] It is equipment which supports informational viewing and listening using an information receiving set. (Additional remark 1) The recommendation receiving

contents identifier acquisition section which acquires the receiving contents identifier which receives the recommendation information about receiving contents from on a network, and is recommended from said recommendation information, Receive the input of change directions to the recommendation information presentation section which shows a user said recommendation information, and said recommendation receiving contents from a user, and the receive section of said information receiving set is received. Receiving contents change signal generation / sending-out section which sends out a receiving contents change signal so that it may change to said recommendation receiving contents, Information viewing-and-listening exchange equipment characterized by being what it has the display which displays said recommendation information, and said recommendation information presentation section displays said recommendation information on said display as.

[0082] The recommendation information generation section which generates the recommendation information about the receiving contents which are equipment which supports informational viewing and listening using an information receiving set, acquire a receiving contents identifier to recommend information viewing and listening to, and contain the receiving contents identifier concerned, (Additional remark 2) The recommendation information distribution place information storing section which stores the distribution place information on the network which distributes said recommendation information, The recommendation information distribution section which distributes said generated recommendation information to the distribution place chosen from the recommendation information distribution place in which it was stored by said recommendation information distribution place information storing section, Information viewing-and-listening exchange equipment with which it has the user interface which inputs information, and said recommendation information generation section is characterized by adding the information inputted through said user interface to said generated recommendation information.

[0083]

[Effect of the Invention] According to the information viewing-and-listening exchange equipment of this invention, the recommendation information from other viewers can be received as receiving-side equipment of recommendation information, and the information receiving contents to which he is viewing and listening can be changed to the recommended information receiving contents according to the recommendation information concerned.

[0084] According to the information viewing-and-listening exchange equipment of this invention, processing in which the recommendation information about information receiving contents, such as television broadcasting which he recommends, is distributed to other viewers as distribution side equipment of recommendation information can be performed simply and smoothly.

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## DESCRIPTION OF DRAWINGS

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[Brief Description of the Drawings]

[Drawing 1] Drawing showing the example of a block configuration of the information viewing-and-listening exchange equipment by the side of the addressee of the recommendation information on this invention

[Drawing 2] The flow chart which shows the example of the flow of processing actuation of the information viewing-and-listening exchange equipment of the operation gestalt 1 of this invention

[Drawing 3] Drawing showing the example of the recommendation information on this invention

[Drawing 4] Drawing showing an example of the pocket mold terminal 70 of this invention, or the appearance of 70'

[Drawing 5] Drawing shown focusing on the example of a configuration of receiving contents change signal generation / sending-out section 30 in the case of corresponding to two or more telecommunications standards

[Drawing 6] Drawing showing the example of a block configuration of the information viewing-and-listening exchange equipment by the side of the distribution person of the recommendation information on this invention

[Drawing 7] Drawing showing the situation of recommendation receiving contents information generation

[Drawing 8] The flow chart which shows the example of the flow of processing actuation of the information viewing-and-listening exchange equipment of the operation gestalt 2 of this invention

[Drawing 9] Drawing showing the example of an addressee side equipment block configuration of the information viewing-and-listening exchange equipment of the operation gestalt 3 of this invention

[Drawing 10] Drawing showing an example in case the information source 80 of the operation gestalt 4 of this invention is television broadcasting

[Description of Notations]

10 Recommendation Receiving Contents Identifier Acquisition Section

20 Recommendation Information Presentation Section

30 Receiving Contents Change Signal Generation / Sending-Out Section

31 Recommendation Receiving Contents Change Directions Reception Section

32 Receiving Contents Change Signal Generation Section

321 Telecommunications Standard Storing Section

322 Telecommunications Standard Setting Section

33 Receiving Contents Change Signal Sending-Out Section  
40 Network Interface  
50 Information Receiving Set  
51 Receipt Information Change Section  
52 Information Receive Section  
53 Receipt Information Display  
60 Internet  
70 70' Pocket mold terminal containing a remote control part  
71 Number Key  
72 Recommendation Information Distribution Key  
73 Liquid Crystal Display Section  
74 Communications Department  
80 Information Source  
90 It is Evaluation Section whenever [ Recommendation ].  
110 Recommendation Information Generation Section  
111 Recommendation Receiving Contents Identifier Input Section  
112 User Interface  
120 Recommendation Information Distribution Place Information Storing Section  
130 Recommendation Information Distribution Section  
131 Recommendation Information Distribution Place Specification Part  
200,300 User  
210,310 Television broadcasting receiving set  
220,320 Remote controller